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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/196,836 | 11/20/1998 | GALEN C. HUNT | 3382-51286 | 9594 |

26119 7590 04/21/2005
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EXAMINER

PATEL, HARESH N

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| ART UNIT | PAPER NUMBER |
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2154

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/196,836

Applicant(s)

HUNT, GALEN C.

Examiner

Haresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-16,18-20,22-27 and 67-72 is/are pending in the application.
- 4a) Of the above claim(s) 57, 59-61, 63-65 and 73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10-16,18-20,22-27 and 67-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: <u>04/07/2005</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/10/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 3-8, 10-16, 18-20, 22-27, and 67-72 are presented for examination. Claims 2, 9, 17, 21, 28-66 and 73 are cancelled. Claims 57, 59-61, 63-65 and 73 are withdrawn (Note: authorization for this withdrawn was given to the examiner, in a telephone interview with Kyle B. Rinehart and Steven A. Wight on April 7, 2005, please see attached interview summary).

Response to Arguments

2. Applicant's arguments filed 12/27/04 have been fully considered but they are not persuasive. Therefore, rejection of claims 1, 3-8, 10-16, 18-20, 22-27, and 67-72 is maintained.

Applicant argues, (1) "the cited reference do not disclose, teach, or suggest all of the features of the claimed subject matter. In particular, the reference fail to disclose, teach or suggest the applicant's claimed limitations, "wherein a software program comprises plural units, and wherein one of the plural units exposes the interface", "determining if the interface has been wrapped by checking a data structure that tracks interface wrapping for the plural units of the software program", "determining if the interface is wrapped by checking a data structure that tracks interface wrapping for plural components of software, wherein one of the plural components exposes the interface", "determining if the interface is wrapped using a hash table". The examiner respectfully disagrees in response to applicant's arguments. The limitations, "wherein a software program comprises plural units, and wherein one of the plural units exposes the interface", "determining if the interface has been wrapped by checking a data structure that tracks interface wrapping for the plural units of the software program", "determining if the interface is wrapped by checking a data structure that tracks interface wrapping for plural

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components of software, wherein one of the plural components exposes the interface”,
“determining if the interface is wrapped using a hash table”, has been newly added, which is
addressed by the new ground(s) of rejection (please refer to the below rejections of this office
action). Therefore, the rejection is maintained.

Double Patenting

3. Applicant's submission of terminal disclaimer, dated 12/27/2004 has been acknowledged.

Information Disclosure Statement

4. The missing reference, “R.R. Heisch, "Trace-directed program restructuring for AIX executables," IBM J. Res. Develop., Vol. 38, No. 5, September 1994”, has been received (attached is the initialed and dated copy of the updated applicant's IDS form 1449, paper dated 2/22/1999). Attached is the initialed and dated copy of the applicant's latest submitted IDS form 1449, paper dated 1/10/2005, along with IDS form 1449, dated 10/17/2001. However, IDS form 1449 between dates 1/10/2000 and 4/4/2001, do not exist in the application for consideration.

Response to Amendment

5. The amendment to the specification filed 05/26/2004 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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6. Due to additional limitations, the claims 1, 3, 5, 7, 15, 16, 20, 22, 25-27, 68 and 72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 7, 68, recite the limitation, “the interface”. There is insufficient antecedent basis for this limitation in the claim. Since, more than one interface exists, i.e., an interface, interface wrapping, in the claim it is not clear which interface is referred by this limitation.

Claim 3, 5 recite the limitations, “the interface”, “the reference”. There is insufficient antecedent basis for this limitation in the claim. Since, more than one interface and reference exists in the claim it is not clear which interface and reference is referred by these limitation.

Claim 15 recites the limitations, “the plural units”, “the unit”. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitations, “the plural units”, “the unit”, “the component”. There is insufficient antecedent basis for this limitation in the claim. Since, more than one unit and component exists in the claim it is not clear which unit and component is referred by these limitation.

Claim 20 recites the limitations, “the reference”, “the component”. There is insufficient antecedent basis for this limitation in the claim. Since, more than one reference and component exists in the claim it is not clear which reference and component is referred by these limitation.

Claims 22, 72 recites the limitations, “the reference”. There is insufficient antecedent basis for this limitation in the claim. Since, more than one reference exists in the claim it is not clear which reference is referred by this limitation.

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Claims 25-27 recites the limitations, "the component". There is insufficient antecedent basis for this limitation in the claim. Since, more than component exists in the claim it is not clear which component is referred by this limitation.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3-8, 10-16, 18-20, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cugin: Efficient Instrumentation for Inter-Component Communication Analysis, pages 1-11, Hunt et. al. February 1997 (Hereinafter Hunt) in view of Sonderegger, Novell Inc, 5,893,118 (Hereafter Sonderegger-Novell).

9. As per claim 1, Hunt teaches a computer-readable medium storing computer-executable instructions for causing a computer system programmed thereby to perform a method (e.g., lines 11 – 19, section 1, page 1) comprising:

detecting a reference to an interface (e.g., lines 1- 9, section 2.3, page 3) wherein a software program comprises plural units (e.g., use of COM library, lines 25 – 36, section 1, page 1), and wherein one of the plural units exposes the interface (e.g., creation of interface, lines 15 – 26, section 2.1, page 2),

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determining the interface by checking a data structure (e.g., lines 1 – 6, section 2.2, page 3), for the plural units of the software program (e.g., use of COM library, lines 25 – 36, section 1, page 1),

returning a reference to an existing entry (e.g., lines 24 – 48, section 2.2, page 3) for the interface from the data structure (e.g., lines 1-18, section 2.2, page 3), wherein the existing entry (e.g., figure 2, section 2.2, page 3) associates the interface with a unit identity (e.g., lines, 22 – 38, section 2.3, page 3) for the unit that exposes the interface;

discovering the unit identity of the unit that exposes the interface (e.g., lines 18 – 36, section 2.2, page 3),

adding an entry to the data structure (e.g., lines 1-18, section 2.2, page 3), wherein the entry associates the interface with the discovered unit identity (e.g., figure 2, section 2.2, page 3), and returning a reference to the entry (e.g., lines 24 – 48, section 2.2, page 3)

However, Hunt does not specifically mention about whether the interface is wrapped or not, tracking interface wrapping and the entry being new entry.

Sonderegger-Novell discloses the well-known concept of whether the interface is wrapped or not (e.g., col., 8, lines 31 – 64, figures 2-6), tracking interface wrapping (e.g., col., 7, lines 32 – 62, figures 3-6) and the entry being new entry (e.g., col., 5, lines 18 – 41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hunt with the teachings of Sonderegger-Novell in order to facilitate checking of whether the interface is wrapped or not and the entry being new entry because the checking of interface would help the software know whether the interface belongs to the object that encapsulates and delegates to another object. The software would help handle

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processing the unit. The new entry would help the data structure to handle additional interface for the software.

10. As per claim 3, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

the step of detecting comprises: noting one or more return parameters from a called function (e.g., lines 1 – 10, section 2.2, page 3), and parsing the one or more return parameters to detect the reference to the interface (e.g., lines 1 –10, section 2.2, page 3).

11. As per claim 4, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claims 1 and 3, Hunt also teaches the following:

the called function is a unit creation function (e.g., lines 32 – 46, section 3, page 5).

12. As per claim 5, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

the step of detecting comprises: noting one or more outgoing parameters to a called function (e.g., lines 1- 9, section 2.3, page 3), and parsing the one or more outgoing parameters to detect the reference to the interface (e.g., lines 1- 9, section 2.3, page 3).

13. As per claim 6, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

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wherein the data structure comprises a hash table (e.g., lines 1 – 6, section 2.2, page 3), and the step of determining comprises: hashing the detected reference (e.g., lines 1 – 6, section 2.2, page 3).

14. As per claim 7, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

the data structure is a hash table (e.g., lines 1-18, section 2.2, page 3), wherein the step of adding an entry comprises: creating a new entry in the hash table (e.g., lines 1-18, section 2.2, page 3), wherein the new entry associates the interface with the discovered unit identity (e.g., lines 1-18, section 2.2, page 3).

15. As per claim 8, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

wherein the data structure comprises a hash table for associating interfaces with interface wrappers (e.g., lines 1-18, section 2.2, page 3), wherein the existing entry is for an existing interface in the hash table (e.g., lines 24 – 48, section 2.2, page 3) wherein the step of determining comprises: hashing the detected reference (e.g., lines 26 – 38, section 2.2, page 3).

16. As per claim 10, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

wherein the data structure comprises a hash table for associating interfaces with interface wrappers (e.g., lines 1 – 9, section 2.2, page 3), the entry is for a interface that stores the unit identity (e.g., lines, 22 – 38, section 2.3, page 3).

17. As per claim 11, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

a local variable stores data comprising the unit identity of the unit that exposes the interface (e.g., lines 2 – 22, section Component Temporal Locality, page 8), and wherein the step of discovering the unit identity comprises noting the value stored in the local variable (e.g., lines 2 – 22, section Component Temporal Locality, page 8).

18. As per claim 12, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

an instrumentation system provides the unit identity of the unit that exposes the interface (e.g., lines 1 – 9, section 2.2, page 3).

19. As per claim 13, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

if the interface checked, verifying the unit identity of the unit that exposes the interface (e.g., lines 22 - 28, section 2.2, page 3).

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20. As per claim 14, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

detecting a communication passing through the interface (e.g., lines 22 – 38, section 2.2, page 3); measuring the size of the communication (e.g., lines 22 – 38, section 2.2, page 3), determining the unit identity of the unit that exposes the interface from the returned reference to the existing entry of the data structure (e.g., lines 1-9, section 2.3, page 3), associating the measured size with the unit that exposes the interface (e.g., lines 36 – 44, section 2.3, page 3).

21. As per claim 15, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 1, Hunt also teaches the following:

receiving a call to a unit activation function from a unit (e.g., lines 4 – 12, section 2.1, page 2); determining a unit identity of the unit from the data structure (e.g., lines 4 – 12, section 2.1, page 2), classifying the unit to be activated based upon the unit identity of the unit (e.g., lines 1 – 15, section 2.1, page 2), resulting in a classifier (e.g., lines 3 – 12, section 2.1, page 2); determining a location in a distributed computing environment using the classifier (e.g., lines 3 – 12, section 3, page 5); and routing the call to the location (e.g., 46 – 58, section 3, page 5).

However, Hunt does not specifically mention about the unit being a client unit and unit to be activated.

Sonderegger-Novell discloses the well-known concept of a client unit (e.g., figure 2, col., 7, lines 21 - 48) and unit to be activated (e.g., col., 8, lines 34 – 63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hunt with the teachings of Sonderegger-Novell in order to

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facilitate usage of a client unit and unit to be activated because the software would help know which unit to handle and activate the unit. The activated unit would help handle the call by the software. Processing the call would help handle the units of the software program.

22. As per claim 16, Hunt teaches a computer-readable medium storing computer-executable instructions for causing a computer system programmed thereby to perform a method (e.g., lines 11 – 19, section 1, page 1) comprising:

on receiving a reference to an interface (e.g., lines 24 – 48, section 2.2, page 3) as a return parameter from a function call (e.g., creation of interface, lines 15 – 26, section 2.1, page 2),

determining the interface by checking a data structure (e.g., lines 1 – 6, section 2.2, page 3), for the plural units of the software program (e.g., use of COM library, lines 25 – 36, section 1, page 1), wherein a software program comprises plural units (e.g., use of COM library, lines 25 – 36, section 1, page 1), and wherein one of the plural units exposes the interface (e.g., creation of interface, lines 15 – 26, section 2.1, page 2),

discovering component identity of the component that exposes the interface (e.g., lines 18 – 36, section 2.2, page 3),

adding an entry to the data structure (e.g., lines 1-18, section 2.2, page 3), wherein the entry associates the interface with the discovered unit identity (e.g., figure 2, section 2.2, page 3).

However, Hunt does not specifically mention about whether the interface is wrapped or not, tracking interface wrapping and the entry being new entry.

Sonderegger-Novell discloses the well-known concept of whether the interface is wrapped or not (e.g., col., 8, lines 31 – 64, figures 2-6), tracking interface wrapping (e.g., col., 7, lines 32 – 62, figures 3-6) and the entry being new entry (e.g., col., 5, lines 18 – 41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hunt with the teachings of Sonderegger-Novell in order to facilitate checking of whether the interface is wrapped or not and the entry being new entry because the checking of interface would help the software know whether the interface belongs to the object that encapsulates and delegates to another object. The software would help handle processing the unit. The new entry would help the data structure to handle additional interface for the software.

23. As per claim 18, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 16, Hunt also teaches the following:

wherein the data structure comprises a hash table (e.g., lines 1 – 6, section 2.2, page 3), and the step of determining comprises: hashing the received reference (e.g., lines 1 – 6, section 2.2, page 3).

24. As per claim 19, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 16, Hunt also teaches the following:

the data structure is a hash table (e.g., lines 1-18, section 2.2, page 3), wherein the step of adding an entry comprises: creating a new entry in the hash table (e.g., lines 1-18, section 2.2,

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page 3), wherein the new entry associates the interface with the discovered unit identity (e.g., lines 1-18, section 2.2, page 3).

25. As per claim 20, Hunt teaches a computer-readable medium storing computer-executable instructions for causing a computer system programmed thereby to perform a method (e.g., lines 11 – 19, section 1, page 1) comprising:

detecting a reference to an interface (e.g., lines 1- 9, section 2.3, page 3) wherein one of the plural components of software exposes the interface (e.g., creation of interface, lines 15 – 26, section 2.1, page 2),

determining the interface by checking a data structure (e.g., lines 1 – 6, section 2.2, page 3),

providing to a component a reference to an existing interface (e.g., lines 24 – 48, section 2.2, page 3), wherein the existing interface stores a reference to instrumentation (e.g., lines 1-20, section 1, page 1), the reference to the interface (e.g., lines 27 – 48, section 2.2, page 3), and component identity (e.g., lines, 22 – 38, section 2.3, page 3) of the component that exposes the interface (e.g., creation of interface, lines 15 – 26, section 2.1, page 2),

storing the reference to the instrumentation (e.g., lines 1-20, section 1, page 1) and the reference to the interface (e.g., lines, 22 – 38, section 2.3, page 3),

creating an entry in the data structure (e.g., lines 1-18, section 2.2, page 3), wherein the entry associates the interface with the wrapper (e.g., figure 2, section 2.2, page 3),

discovering the component identity of the component that exposes the interface (e.g., lines, 22 – 38, section 2.3, page 3),

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storing the component identity of the component that exposes the interface (e.g., lines 1-18, section 2.2, page 3, figure 2),

providing to the component a reference to the interface wrapper and receiving from the component an invocation of the instrumentation (e.g., lines 1-20, section 1, page 1) through the provided reference to the existing interface wrapper (e.g., lines 1-18, section 2.2, page 3).

However, Hunt does not specifically mention about whether the interface is wrapped or not using hash table, creating a new interface wrapper, storing in the new interface wrapper, the component being client and the entry being new entry.

Sonderegger-Novell discloses the well-known concept of whether the interface is wrapped or not (e.g., col., 8, lines 31 – 64, figures 2-6), creating a new interface wrapper (e.g., col., 5, lines 22 – 46, col., 9, lines 18 – 38), storing in the new interface wrapper (e.g., col., 8, lines 12 – 39, figures 5 and 6), the component being client (e.g., col., 7, lines 21 – 39, figure 2) and the entry being new entry (e.g., col., 5, lines 18 – 41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hunt with the teachings of Sonderegger-Novell in order to facilitate checking of whether the interface is wrapped or not and the entry being new entry because the checking of interface would help the software know whether the interface belongs to the object that encapsulates and delegates to another object. The software would help handle processing the unit. The new entry would help the data structure to handle additional interface for the software. The newly created interface wrapper would help store the information related to the component.

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26. As per claim 22, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 20. Hunt also teaches the following:

the step of determining comprises: hashing the detected reference (e.g., lines 1 – 6, section 2.2, page 3),

if the detected reference hashes to the existing interface wrapper (e.g., lines 2 – 20, section 2.4, page 4), returning the reference to the existing interface wrapper (e.g., lines 1 – 38, section 2.2., page 3) and otherwise returning a value (e.g., lines 1 – 38, section 2.2., page 3).

27. As per claim 23, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 20. Hunt also teaches the following:

the reference to instrumentation comprises a pointer to a table comprising at least one pointer to one or more instrumentation functions (e.g., lines 1 – 38, section 2.2., page 3).

28. As per claim 24, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 20. Hunt also teaches the following:

the step of creating an interface wrapper further comprises storing in the interface wrapper a type description of the interface (e.g., lines 13 – 36, section 2.4, page 4).

29. As per claim 25, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 20. Hunt also teaches the following:

a local variable stores the component identity of the component that exposes the interface (e.g., lines 2 – 22, section Component Temporal Locality, page 8), and wherein the step of

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discovering the component identity of the component that exposes the interface comprises noting the value stored in the local variable (e.g., lines 2 – 22, section Component Temporal Locality, page 8).

30. As per claims 26 and 27, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claim 20. Hunt also teaches the following:

a communication from the component directed towards the component that exposes the interface (e.g., lines 22 – 38, section 2.2, page 3); measuring the size of the communication using the instrumentation (e.g., lines 22 – 38, section 2.2, page 3), associating the measured size with the component that exposes the interface and the component (e.g., lines 36 – 44, section 2.3, page 3),

calling the component that exposes the interface (e.g., lines 1-9, section 2.3, page 3),

before the step of calling the component, setting a return address for returning from the called component as a reference to the instrumentation (e.g., lines 4 – 12, section 2.1, page 2),

after the step of calling the component receiving from the component that exposes the interface a second invocation of the instrumentation (e.g., lines 1 – 15, section 2.1, page 2), comprises a second communication from the component to the another component (e.g., lines 4 – 12, section 2.1, page 2),

measuring the size of the second communication using the instrumentation (e.g., lines 22 – 38, section 2.2, page 3), associating the measured size of the second communication with the component that exposes the interface and the component (e.g., lines 36 – 44, section 2.3, page 3),

returning control to the component (e.g., 46 – 58, section 3, page 5).

However, Hunt does not specifically mention about the component being a client component and invocation to the client.

Sonderegger-Novell discloses the well-known concept of a client component (e.g., figure 2, col., 7, lines 21 - 48) and invocation to the client (e.g., col., 8, lines 34 - 63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hunt with the teachings of Sonderegger-Novell in order to facilitate usage of a client component and invocation to the client because the software would help know which component to handle. The invocation to the client would help process the component related information by the software. Processing the invocation would help handle the components of the software program.

31. Claims 67, 69 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt and Sonderegger-Novell in view of "Official Notice".

32. As per claims 67, 69 and 71, Hunt and Sonderegger-Novell teach the claimed limitations as rejected under claims 1, 16 and 20. Hunt also teaches the concept of automatic distribution and partitioning of software components (e.g., lines 19 - 52, section 7, page 10).

However, Hunt and Sonderegger-Novell and do not specifically mention that the instructions are for automatic distributed partitioning system software. "Official Notice" is taken that both the concept and advantages of providing instructions are for automatic distributed partitioning system software is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include instructions are for automatic distributed partitioning system software with

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the teachings of Hunt and Sonderegger-Novell in order to facilitate instructions for the software because the instructions would help the software to automatically partition and distribute the components. For example, Galen C. Hunt and Micahel L. Scott, August 1998, "The Coign Automatic Distributed Partitioning System", pages 1 and 2, (Hereinafter Hunt & Scott) discloses software components of the ADPS. The system software would help carryout instructions for the components.

33. Claims 68, 70 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt and Sonderegger-Novell in view of Jordan, Intergraph Corporation, 6,016,392 (Hereinafter Jordan-Intergraph).

34. As per claims 68, 70 and 72, Hunt and Sonderegger-Novell teach the claimed limitations rejected under claims 1, 16 and 20.

However, Hunt and Sonderegger-Novell and do not specifically mention about a pointer to the interface.

Jordan-Intergraph discloses the well-known concept of using a pointer to the interface (e.g., col., 2, lines 18 – 44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hunt and Sonderegger-Novell with the teachings of Jordan-Intergraph in order to facilitate a pointer to the interface because the pointer would help reference the interface. The interface would help the software to handle the component. The software would help process the component using the interface.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is 703-605-5234. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 703-305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

April 14, 2005


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100